

## ABSTRACT OF THE DISCLOSURE

A method of isolating sources of variance in parametric data includes steps of: (a) cleaning a data set of measurements for a plurality of parameters; (b) generating a principal component analysis basis from the cleaned data set; (c) estimating an independent component analysis model from the principal component analysis basis; (d) calculating percentages of variance for the plurality of parameters explained by each component in the estimated independent component analysis model; (e) if the calculated percentages of variance indicate that a component is a minor component, then transferring control to step (f), else transferring control to step (g); (f) removing the minor component from the principal component analysis basis and transferring control to step (c); and (g) generating as output the estimated independent component analysis model wherein no component of the independent component analysis model is a minor component.

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